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October 8, 2010

Mr. Brett Cahoon
Project Manager
KRAUS-ANDERSON CONSTRUCTION COMPANY.
3716 Oneota Street
Duluth, MN 55807

RE: **LEAN MIX CONCRETE NONCOMPLIANCE**
Duluth International Airport
New Passenger Terminal Bid Pack 1

Dear Mr. Cahoon:

I have received your letter dated October 7, 2010 regarding the use of lean-mix concrete under the building footings.

Specification 02220 part 3.5 C-1 clearly states "Building footings shall bear directly on undisturbed native soils or lean-mix concrete over undisturbed native soils as defined by the Addendum to the Project Geotechnical Report Dated January 29, 2010." Footing notes on sheet S002 and plan details on sheet S501, also detail the use of lean-mix concrete under footings not bearing on undisturbed native soils.

Soil borings in the building area indicate fill material over native soils between two feet and four feet below existing grade. All footings are a minimum of six feet below finished floor elevation, which is approximately two feet above the existing grade. If properly excavated, most footings should bear on undisturbed native soils without additional excavation necessary below the required subgrade elevation.

Detail 7 on sheet S502, and detail 1 on sheet S504 require that all underground utilities be above a 1H:1V. If a utility trench extends below the line, the footing will need to be lowered to bear on undisturbed native soil or lean-mix concrete as directed by the engineer.

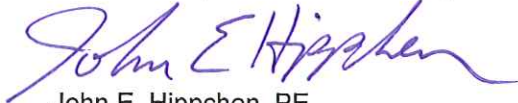
The use of lean-mix concrete under footings that do not bear directly on undisturbed native soil is clearly a part of the contract documents. As provided in the specifications, if soil conditions vary from what is shown in the soil borings, or utility removals result in excavations deeper than can be expected from the contract documents, additional compensation will be made relative to the changes in work.

Also, the contract documents require that all backfill shall be as defined in the Project Geotechnical Report. In addition to the requirements discussed above, unsuitable soils under the floor slabs shall be removed and replaced with engineered fill.

Please feel free to contact me if you have any questions or concerns in this matter.

Very truly yours,

REYNOLDS, SMITH AND HILLS, INC.



John E. Hippchen, PE
Project Manager

Cc: Brian Ryks, DAA
Brian Grefe, DAA
Thomas Chambers, RS&H
Craig Bursch, MBJ
Joan Christianson, City of Duluth's Attorney's Office